



US0D1103951S

(12) **United States Design Patent**
Mao et al.

(10) **Patent No.: US D1,103,951 S**
(45) **Date of Patent: ** Dec. 2, 2025**

(54) **CIRCUIT BOARD**

(71) Applicant: **Canaan Creative Co., LTD.**, Beijing (CN)
(72) Inventors: **Hongbin Mao**, Beijing (CN); **Nangeng Zhang**, Beijing (CN)
(73) Assignee: **Canaan Creative Co., LTD.**, Beijing (CN)
(**) Term: **15 Years**
(21) Appl. No.: **29/947,881**
(22) Filed: **Jun. 18, 2024**

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,072,734	A	1/1963	Fox	
D273,582	S *	4/1984	Bolt	D13/182
D273,860	S *	5/1984	Bolt	D13/182
D292,698	S	11/1987	DeVita	
D363,920	S	11/1995	Roberts	
D430,856	S	9/2000	Wilkerson	
D459,706	S *	7/2002	Ebihara	D13/182
D466,093	S *	11/2002	Ebihara	D13/182
D471,167	S *	3/2003	Ebihara	D13/182
D471,524	S *	3/2003	Ebihara	D13/182
6,765,278	B2	7/2004	Parsons	
D547,371	S *	7/2007	Miller	D20/40
D552,098	S *	10/2007	Nishizawa	D14/436

(Continued)

OTHER PUBLICATIONS

Printed Circuit Board Basics: From Design to Final Artwork,<https://resources.pcb.cadence.com/blog/2023-an-introduction-to-printed-circuit-boards>. (Year: 2023).*

(Continued)

Related U.S. Application Data

(62) Division of application No. 29/890,170, filed on Apr. 20, 2023, now Pat. No. Des. 1,059,313.

Foreign Application Priority Data

(30) Oct. 20, 2022 (CN) 202230691957.0
Oct. 20, 2022 (CN) 202230691984.8
Apr. 13, 2023 (CN) 202330202319.2
(51) **LOC (15) Cl.** **13-03**
(52) **U.S. Cl.**
USPC **D13/182**
(58) **Field of Classification Search**
USPC D13/182; 361/748, 752, 760, 761, 807, 361/808, 736, 719, 720; 174/250, 253, 174/255, 68.1; 363/144, 147
CPC H05K 3/30; H05K 3/301; H05K 3/284; H05K 3/303; H05K 1/18; H05K 1/181; H05K 1/182; H05K 1/183; H05K 1/185; H05K 1/00; H05K 7/1417; H05K 7/02; H05K 7/12; H05K 7/06; H01L 2924/14
See application file for complete search history.

Primary Examiner — Elizabeth J Oswecki
(74) *Attorney, Agent, or Firm* — Sheppard Mullin Richter & Hampton LLP

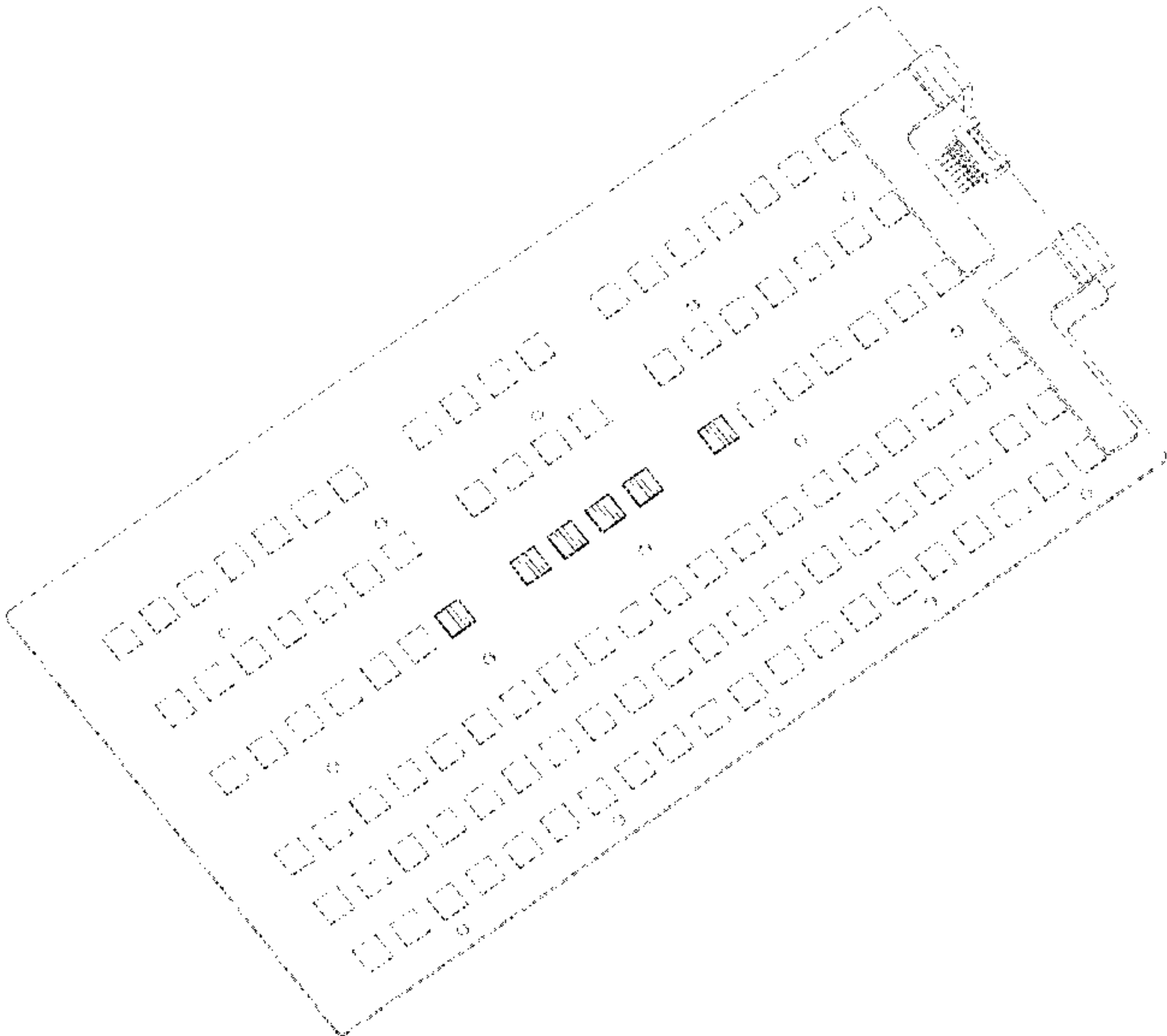
(57) **CLAIM**

The ornamental design for a circuit board, as shown and described.

DESCRIPTION

FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof; and,
FIG. 7 is a bottom view thereof.
The broken lines represent environmental structure that form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D603,812 S * 11/2009 Johnson D13/182
7,864,540 B2 * 1/2011 Takiar H01L 24/97
361/736
D637,193 S 5/2011 Andre
D639,756 S 6/2011 Greene, Jr.
D642,546 S 8/2011 Greene, Jr.
D647,072 S 10/2011 Bentley
D669,478 S * 10/2012 Lepp D14/436
D669,479 S * 10/2012 Lepp D14/436
D673,921 S * 1/2013 Ozawa D13/182
D673,922 S * 1/2013 Moriai D13/182
D681,640 S * 5/2013 Aoki D14/436
D690,672 S * 10/2013 Yoshida D13/182
D699,201 S * 2/2014 Petsch D13/182
D735,203 S * 7/2015 Kim D14/435
D735,204 S * 7/2015 Kim D14/435
D735,962 S * 8/2015 Cruz D34/38
D736,212 S * 8/2015 Kang D14/436
D736,213 S * 8/2015 Kang D14/436
D736,216 S * 8/2015 Kang D14/436
D739,856 S * 9/2015 Kang D14/436
D755,163 S * 5/2016 Yokoyama D14/230
D757,015 S * 5/2016 Amit D14/341
D759,022 S * 6/2016 Beals D14/437
D768,115 S * 10/2016 Kazanchian D14/230
D772,232 S * 11/2016 Cho D14/436
D775,092 S * 12/2016 Vinciarelli D13/182
D783,621 S * 4/2017 Lee D14/436
D787,456 S 5/2017 Matsumoto
D787,457 S 5/2017 Matsumoto
D798,868 S 10/2017 Daniel
D799,438 S 10/2017 Takahashi
D814,473 S * 4/2018 Kadonaga D14/436
D821,339 S * 6/2018 McCurley D13/182
D831,009 S * 10/2018 Horn D14/230
D837,171 S * 1/2019 Vasoya D13/182
D848,432 S * 5/2019 Lim D14/435
D856,948 S * 8/2019 Vasoya D1/100
D864,968 S * 10/2019 Beals D14/437

D869,470 S * 12/2019 Lim D14/435
10,510,626 B2 * 12/2019 Braun H01L 21/3065
D872,032 S * 1/2020 Morelli D13/182
D872,033 S * 1/2020 Morelli D13/182
D880,484 S 4/2020 Li
D883,240 S 5/2020 Fathauer
D892,774 S * 8/2020 Sudo D14/230
D893,439 S * 8/2020 Vasoya D1/100
D902,164 S * 11/2020 Kondo D13/182
D909,319 S 2/2021 Nordeen
D930,601 S 9/2021 McBride
D938,374 S 12/2021 McBride
D944,219 S 2/2022 McBride
D949,117 S 4/2022 McBride
D956,707 S 7/2022 Yamauchi
D958,762 S 7/2022 McBride
D989,014 S 6/2023 McBride
D1,001,753 S 10/2023 McBride
D1,009,815 S 1/2024 McBride
D1,010,591 S 1/2024 McBride
D1,012,872 S 1/2024 McBride
D1,022,931 S 4/2024 Kannan
D1,054,391 S * 12/2024 Du D13/182
D1,059,313 S * 1/2025 Mao D13/182
D1,059,314 S * 1/2025 Zhang D13/182
2003/0081387 A1 * 5/2003 Schulz H05K 1/117
361/728
2006/0097374 A1 * 5/2006 Egawa H01L 23/3128
257/E23.025
2009/0268390 A1 10/2009 King
2017/0034941 A1 * 2/2017 McCurley H05K 1/02

OTHER PUBLICATIONS

Printed Circuit Board Basics: From Design to Final Artwork, <https://resources.pcb.cadence.com/blog/2023-an-introduction-to-printed-circuit-boards>. (Year: 2023), 9 pages.
Non-Final Office Action for U.S. Appl. No. 29/890,170 and List of references Cited, mailed on Jul. 11, 2024, 15 pages.

* cited by examiner

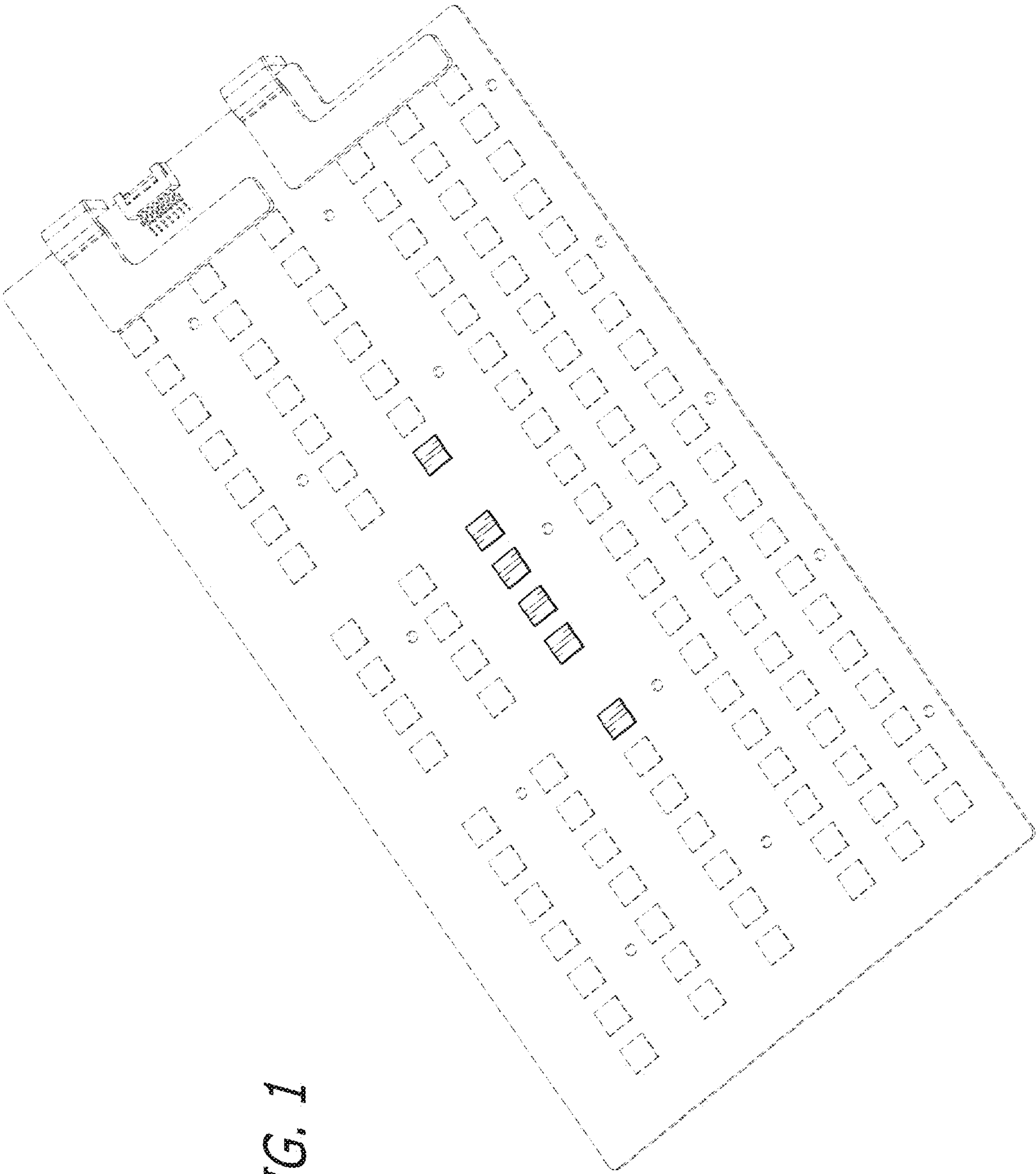


FIG. 1

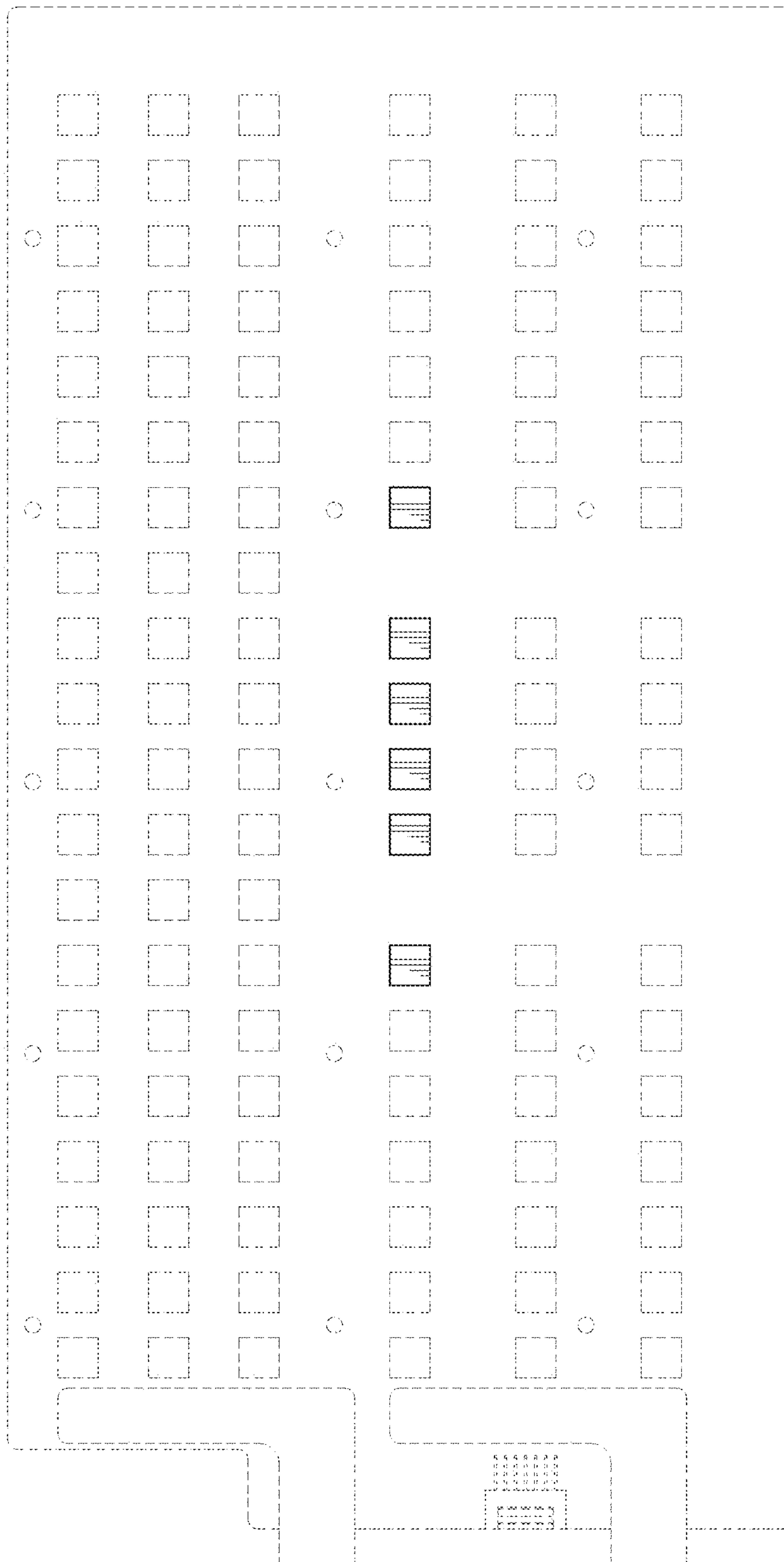


FIG. 2

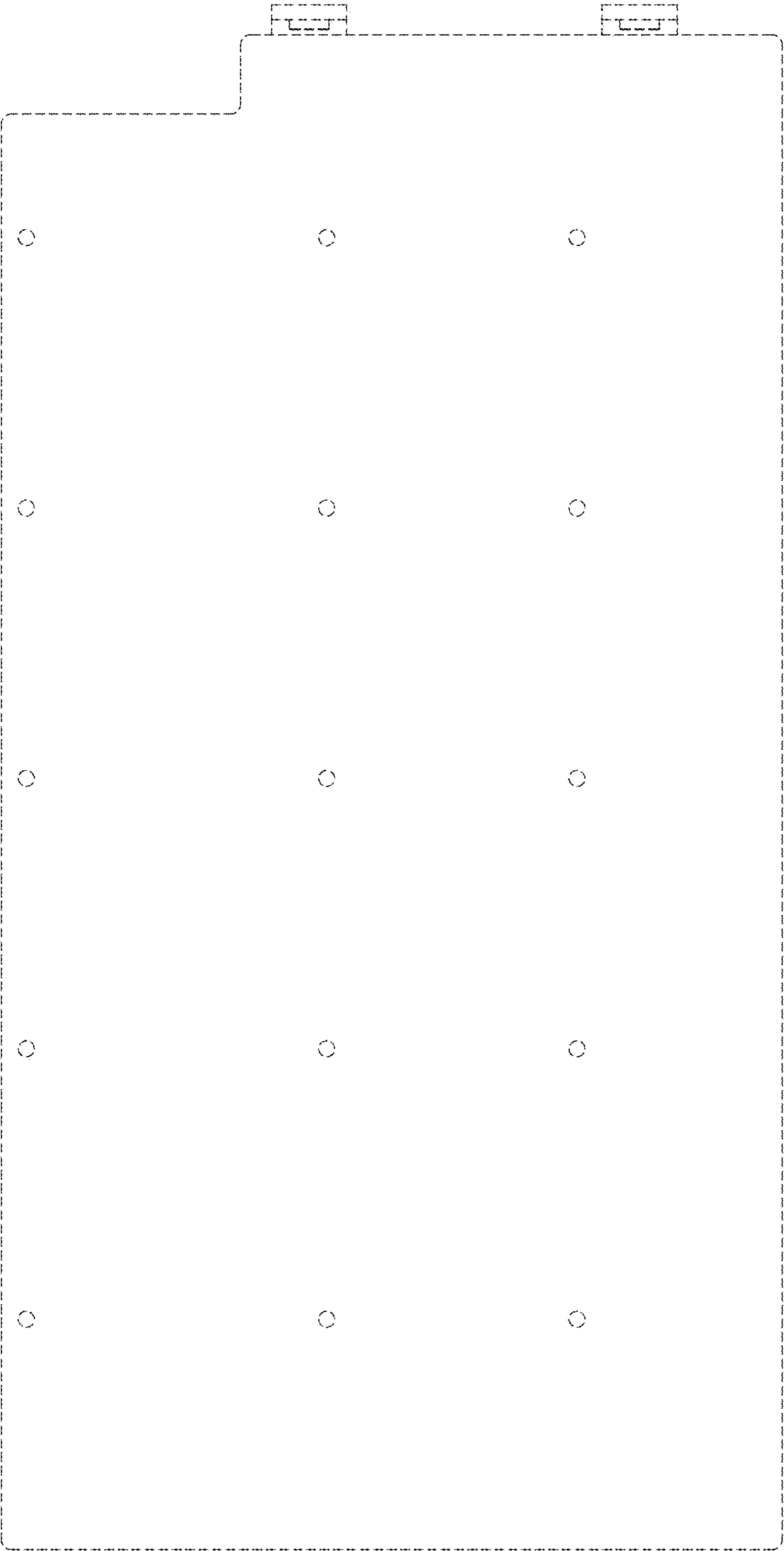


FIG. 3

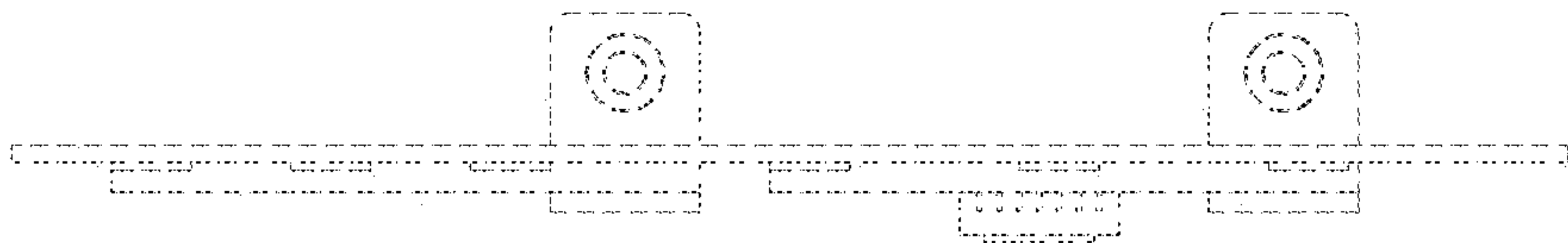


FIG. 5

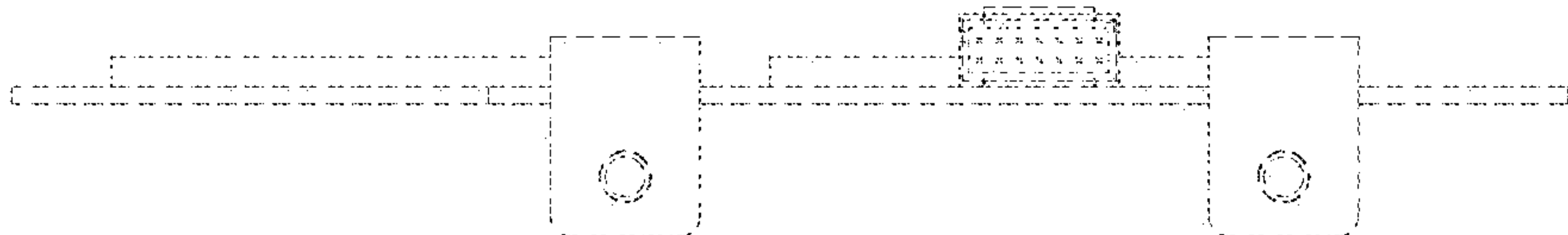


FIG. 4

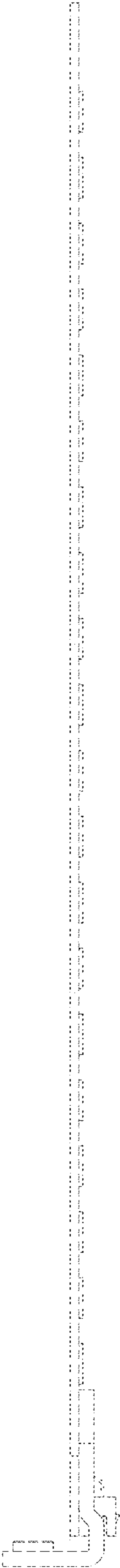


FIG. 6

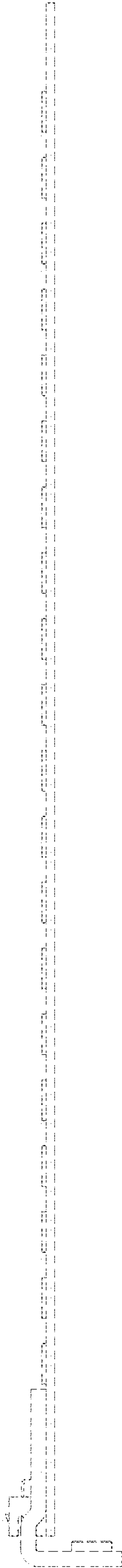


FIG. 7